

RESOURCE MANAGEMENT PLAN/

ENVIRONMENTAL IMPACT STATEMENT

Butte District, Montana

**NOVEMBER 1983** 





United States Department of the Interior

Bureau of Land Management



REFER TO:

## United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT**

P.O. Box 36800 222 North 32nd Street Billings, Montana 59107

November 1983

#### Dear Reader:

Enclosed for your review and future reference is the final environmental impact statement (FEIS) for the Headwaters Resource Management Plan (RMP). This document also includes the proposed plan, which is a slightly modified version of the preferred alternative discussed in the draft RMP/EIS published in May 1983. The proposed plan incorporates all RMP-level guidance needed to resolve the eleven land management issues identified earlier in the planning process.

Although this plan continues to refer only to "the Headwaters Resource Area," it now involves the newly established Great Falls Resource Area as well. In April 1983, administrative responsibility for public land in Pondera, Teton, Cascade, Meagher, and the northern half of Lewis and Clark counties was transferred from the Headwaters Resource Area office of the Butte District to the Great Falls Resource Area office of the Lewistown District. This transfer of responsibilities was a direct result of the merger of the BLM and the former Minerals Management Service. The net result of these changes is that two offices, rather than one, will be responsible for implementation and monitoring of the Headwaters RMP.

With the exception of the recommendations for the Black Sage and Yellowstone River Island Wilderness Study Areas, all parts of this proposed plan may be protested. Protests should be sent to the Director (202), Bureau of Land Management, 1800 C Street NW, Washington, DC, 20240, prior to December 31, 1983—the end of the thirty-day protest period—and should include the following information:

The name, mailing address, telephone number, and interest of the person filing the protest.

A statement of the issue or issues being protested.

A statement of the part or parts of the plan being protested.

A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party, or an indication of the date the issue or issues were discussed for the record.

A concise statement explaining why the proposed decision is believed to be wrong.

At the end of the thirty-day protest period, the proposed plan, excluding any portion under protest, will become final. Approval will be withheld on any portion of the plan under protest until final action has been completed.

Any significant change to the proposed plan made as a result of a protest will be made available for public review and comment prior to final approval and implementation.

I want to personally thank those of you who have contributed to and participated in the development of this plan. The Headwaters RMP is one of the first land use plans to be prepared under the BLM's new resource management planning procedures, and it has been a learning process for all of us. I hope your involvement will continue as we move forward into the implementation and monitoring phases of the Headwaters Plan, and also as we develop RMPs for other BLM lands in Montana and the Dakotas.

Sincerely yours,

Mike Penfold State Director

Mulael (). It

### **FINAL**

# RESOURCE MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

# For The

# HEADWATERS RESOURCE AREA BUTTE DISTRICT MONTANA

Prepared By

BUREAU OF LAND MANAGEMENT DEPARTMENT OF THE INTERIOR

STATE DIRECTOR MONTANA STATE OFFICE NOVEMBER 1983

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# HEADWATERS RESOURCE AREA RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

The Final Resource Management Plan/Environmental Impact Statement (RMP/EIS) addresses future management options for approximately 311,337 surface acres and 655,505 acres of federal mineral estate administered by the Bureau of Land Management through its Headwaters Resource Area office in Butte, Montana, and through its Great Falls Resource Area office in Great Falls, Montana. The plan primarily focuses on resolving eleven key resource management issues. These issues are: oil and gas leasing and development, grazing allotment and riparian habitat management, wilderness study recommendations, forest management, land ownership adjustments, mineral exploration and development, motorcycle use areas, motorized vehicle access, utility and transportation corridors, coal leasing in the Great Falls coal field, and special designations.

Four RMP alternatives are considered in detail in this document, which incorporates by reference much of the material presented in the Draft RMP/EIS. Alternative A, the proposed Resource Management Plan, represents a balance between resource production and environmental protection. Alternative B, the no action alternative, is a continuation of present management direction. Alternative C, environmental protection, represents an emphasis on maintaining or improving important environmental values. Alternative D, resource production, represents an emphasis on making public land and resources available for use and development. When the RMP is finalized, it will provide a comprehensive framework for managing and allocating public land during the next ten or more years. For further information, contact Lyle Fox, Headwaters Area Manager, Butte District Office, P.O. Box 3388, Butte, Montana 59702; Telephone (406) 494-5059, or contact Nancy Cotner, Great Falls Area Manager, 215 First Avenue North, P.O. Drawer 2865, Great Falls, Montana 59403, Telephone (406) 727-0503.

November 1983

# HOW TO USE THE DOCUMENT

This is the Final Resource Management Plan (RMP)/Environmental Impact Statement (EIS) for the Headwaters Resource Area. The Draft RMP/EIS was sent out in May 1983.

#### **CHANGES**

This document includes changes in the sections entitled Summary; Introduction; Alternatives, Including the Proposed Action; Environmental Consequences, Alternative A; Consultation and Coordination; List of Preparers; and Appendixes A, B, E, H, and M. **These changes are highlighted in bold print.** 

#### **ADDITIONS**

Additional sections have been added to the Final RMP/EIS that did not appear in the Draft. In the chapter entitled Public Comments, all substantive public comments on the Draft RMP/EIS are listed along with the BLM's response to such comments. Appendix V contains reprints of the actual letters received from the public. Appendix T gives the criteria for determining methods for selling public land. Appendix U is the errata for the sections of the Draft that were not reprinted in the Final.

# REFERENCED SECTIONS OF THE DRAFT

The final RMP/EIS incorporates by reference the sections of the Draft entitled Affected Environment; Environmental Consequences, Alternatives B, C, and D; Appendixes C, D, F, G, I, J, K, L, N, O, P, Q, R, and S; Glossary; References; and Map Packet.

#### SUGGESTIONS FOR REVIEW

The Final RMP/EIS is organized for several levels of review.

- If a particular issue is of concern, you will find a brief summary of the issue in Chapter 1, Issues and Criteria; a discussion of how the issue would be resolved in each alternative in Chapter 2, Alternatives; a comparison of alternative outputs and allocations for each issue, also in Chapter 2, Alternatives; and comments and responses on the issue in Chapter 7, Public Comments.
- If a brief overview of the Final RMP/EIS is desired, you should review the sections entitled Summary, Issues and Criteria, and Alternatives.
- If a detailed study of the preferred alternative is required, you should review the Final RMP/EIS along with the incorporated sections of the Draft RMP/EIS and the Map Packet.

#### **SUMMARY**

This proposed Headwaters Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS) addresses future management options for approximately 311,337 surface acres and 655,505 acres of federal mineral estate administered by the Bureau of Land Management (BLM) through its Headwaters Resource Area office in Butte, Montana. The Headwaters Resource Area encompasses nine counties in west-central Montana—Broadwater, Cascade, Gallatin, Jefferson, Lewis and Clark, Meagher, Park, Pondera, and Teton.

When approved, the Headwaters RMP will provide a comprehensive framework for managing and allocating public land and resources in the resource area during the next ten or more years. However, the RMP is primarily focused on resolving eleven key resource management issues. These issues are: oil and gas leasing and development, particularly along the Rocky Mountain Front; grazing allotment and riparian habitat management; wilderness study recommendations; forest management; land ownership adjustments; mineral exploration and development, particularly within the Scratchgravel Hills; motorcycle use areas: motorized vehicle access: utility and transportation corridors; coal leasing in the Great Falls Coal Field; and special designations, such as Outstanding Natural Areas.

Four RMP alternatives have been considered in detail during the development of this document. One represents no action, which means a continuation of present management direction. The other three alternatives provide a range of choices from those favoring resource protection to those favoring resource production.

The proposed Resource Management Plan incorporates portions of the no action, protection, and production alternatives, and generally represents a balance between resource production and environmental protection. The proposed RMP is essentially the same as the preferred alternative addressed in the Draft RMP/EIS, published in May 1983. However, changes have been made in response to public comments affecting the resolution of three issues: Forest Management, where commercial forest land adjacent to the Elkhorn Wildlife Management Area has been set aside from timber harvest, reducing the resource area's annual allowable cut from 2.65 mmbf to 2.4 mmbf; Land Ownership Adjustments, where 1,040 acres of public land previously included in the disposal and further study categories have been moved to the retention category; and Coal Leasing, where an additional 25 acres of federal coal in the Great Falls coal field have been identified for no surface occupancy stipulations. The allocations or outputs and environmental consequences that characterize the proposed RMP are summarized below.

#### **ALTERNATIVE A**

Alternative A is the preferred alternative.

Under Alternative A, oil and gas leasing and development would be permitted on 99,700 acres of federal mineral estate along the Rocky Mountain Front (84% of the total acreage available for consideration in that area), and on approximately 634,607 acres of federal mineral estate within the entire resource area (97% of the total). Oil and gas leasing and development within specific portions of the Rocky Mountain Front area would be subject to seasonal restrictions (49.500 acres) and to no surface occupancy stipulations (14,040 acres) to protect important grizzly bear and other wildlife habitat, and to prevent surface disturbance in the proposed Outstanding Natural Areas. Approximately 18,550 acres would not be available for leasing because of no surface occupancy restrictions that effectively prohibit oil and gas development. The remaining 36,160 acres along the Rocky Mountain Front would be leased subject only to standard stipulations.

Authorized livestock use in the resource area would be targeted for reductions in 19 allotments, for increases in 7 allotments, and for no change in 301 allotments. Target levels of adjusted livestock use would be based on range condition ratings and the Soil Conservation Service's Montana Grazing Guides. The net result of all adjustments in the resource area would be a 2,204 AUM (7%) short-term reduction in current authorized livestock use. In the long term, livestock use would be expected to increase to 33,417 AUMs, or 6% above current levels.

The estimated range improvements required to implement this alternative include: 2,560 acres of reseeding, 300 acres of prescribed burning, 62.2 miles of fence construction, 21 spring developments, 23.5 miles of pipeline, 20 stock tanks, 467.5 acres of noxious weed control, 11 cattleguards, and 5 other water developments. The estimated initial cost for all improvements is \$449,331.

This alternative would result in a significant longterm improvement in ecological range condition. The percentage of the resource area in good and excellent condition would increase from 57% to 75%, while fair and poor condition ratings would decrease from 43% to 25%. The long-term effect of this alternative on riparian habitat would be to increase the mileage of stream banks in satisfactory riparian condition from the current 104 miles to 130 miles.

None of the five areas currently under wilderness study would be recommended to Congress for wilderness designation. However, three of the areas (Blind Horse Creek, Chute Mountain, and Deep Creek/Battle Creek), comprising 11,218 acres, would be proposed for Outstanding Natural Area designation and would be managed essentially as wilderness.

Forest resources under this alternative would be managed essentially as they are at present except for commercial forest land adjacent to the Elkhorn Wildlife Management Area, which would be set aside from timber harvest activities. The estimated potential timber yield for the resource area would be 24.0 million board feet per decade, well above the average actual harvest rate of approximately 1 million board feet per decade. Most of the public land in the resource area would be available for forest management activities; the only areas in addition to the Elkhorn area to be set aside from such activities would be the four proposed Outstanding Natural Areas along the Rocky Mountain Front, the proposed Sleeping Giant Area of Critical Environmental Concern, the Scratchgravel Hills, and the Yellowstone River Island. Commercial forestland in the Eightmile Creek, Boulder-Clancy. Marysville, and Rogers Pass areas would receive the highest priority for forest management activities. Special harvest restrictions would be applied in key elk seasonal use areas.

Under Alternative A, the land ownership adjustment issue would be resolved by establishing priority areas for retention and acquisition, disposal, and further study. Approximately 283,323 acres of public land within retention areas would remain in public ownership and be managed by the BLM. Approximately 25,317 acres of public land within disposal areas would be available for disposal through sales and/or exchanges, with exchange being the preferred method of disposal. The remaining 2,697 acres of public land within further study areas would not be prioritized at this time. All subsequent site-specific decisions regarding land ownership adjustments would be made based on criteria identified in the plan.

Future investments in public facilities and improvements, including land and access acquisition, generally would receive highest priority in retention areas. In the long term, Alternative A would result in a minor overall improvement in the land ownership pattern and the legal accessibility of public land in the resource area.

Mineral exploration and development in the resource area would not be significantly affected under this alternative. The withdrawal review program would continue, resulting in a projected future decrease of 11,587 acres of public land withdrawn from mineral entry. Approximately 613,486 acres (94%) of federal minerals in the resource area would be available for mineral entry and development in the long term.

Under this alternative, approximately 77,203 acres of public land, including the Scratchgravel Hills and the Limestone Hills, would be closed to organized motorcycle events. Approximately 234,134 acres, including the Hilger Hills, Spokane Hills, and Marysville areas, would remain available for further consideration. Applications for motorcycle events on public land within areas identified as available for further consideration would be evaluated on a case-by-case basis using criteria provided in the plan. The long-term effect of this alternative would be a minor degrease in the availability of public land for organized motorcycle events.

Alternative A would identify approximately 219,404 acres of public land as priority areas for motorized vehicle access restrictions, and 12,058 acres would be closed yearlong to motorized vehicle access. The remaining 79,875 acres would be open without restrictions. Public land within priority areas for restrictions generally will receive priority attention during travel planning. Specific roads, trails, or portions of such areas may be closed seasonally or yearlong to all or specific types of motorized vehicle use. Criteria provided in the plan would guide future site-specific motorized vehicle access decisions. The long-term effect of this alternative would be a minor decrease in the availability of public land for motorized vehicle access.

The utility and transportation corridor issue would be resolved by identifying approximately 74,489 acres of public land as avoidance areas, and 952 acres as windows. The remaining 235,896 acres of public land in the resource area would remain available for further consideration. Public land within avoidance areas generally would not be available for corridor development; public land within windows would be available. Criteria provided in the plan would guide future site-specific decisions regarding corridor development.

The preferred alternative would make all federal coal in the Great Falls Coal Field available for further consideration for leasing, pending further study. Approximately 25,452 acres of federal minerals, containing an estimated 125.6 million short tons of coal, would be affected. Approximately 1,780 acres would be identified for no sur-

face occupancy to protect public roads, rights-ofway, floodplains, and important wildlife habitat. All coal would be extracted by using underground mining methods.

Four Outstanding Natural Areas would be designated along the Rocky Mountain Front—Blind Horse Creek, Ear Mountain, Chute Mountain, and Deep Creek/Battle Creek. These four areas, comprising 12,058 acres of public land, would be managed to protect wildlife habitat, scenery, and other surface resource values from disturbance. In addition, 11,609 acres of public land in the Sleeping Giant area would be designated as an Area of Critical Environmental Concern, and would be managed with primary emphasis on the protection and enhancement of wildlife and recreation values. All remaining public land in the resource area, totalling 287,670 acres, would continue to be managed without special designation.

Air quality would not be significantly affected by this alternative, watershed conditions would improve moderately, and water quality would increase slightly in the long term. Neither developed recreation opportunities, visual quality, nor cultural resources would be significantly affected by this alternative. There would be a minor increase in dispersed, nonmotorized recreation opportunities.

Under this alternative, all categories of wildlife habitat would either improve in condition, or would be essentially unaffected. The most significant improvement would occur in grizzly bear, riparian, waterfowl, and fisheries habitats. Moderate levels of improvement would occur in elk, bighorn sheep, mule deer, gray wolf, bald eagle, and upland game bird habitats.

The short-term adjustments in livestock use proposed under this alternative would result in moderately significant economic impacts—both positive and negative—for the affected ranch operators. In the long term, the expected increases in livestock forage availability would result in moderately significant positive economic impacts to affected operators. The net overall impact of this alternative on the regional economy and attitudes is expected to be insignificant.

# **TABLE OF CONTENTS**

HOW TO USE THIS DOCUMENT	
SUMMARY	i
INTRODUCTION  Purpose and Need  Planning Process Overview	1
ISSUES AND CRITERIA	
Issue-Driven Planning Issues Addressed in the Headwaters RMP	5
Planning Criteria	
ALTERNATIVES, INCLUDING THE PROPOSED ACTION	٠٠٠٠ و
Alternatives Eliminated from Detailed Study	12
Alternatives Considered in Detail	25
Selection of the Preferred Alternative	
(See Draft Environmental Impact Statement)	
ENVIRONMENTAL CONSEQUENCES	53
CONSULTATION AND COORDINATION	
Document Preparation	79
Consistency	79
Public Participation	80
Preparation of the Final RMP/EIS	82
LIST OF PREPARERS	83
PUBLIC COMMENTS  Analysis and Review Procedures  Comments and Responses	87
APPENDIXES APPENDIX A: DESCRIPTION OF MANAGEMENT UNITS	100
APPENDIX B: OIL AND GAS LEASING PROCEDURES	
APPENDIX C: GENERAL BEST MANAGEMENT PRACTICES (See Draft Environmental Impact Statement)	
APPENDIX D: SUMMARY OF ALLOTMENT CONDITIONS AND AUTHORIZED USE (See Draft Environmental Impact Statement)	
APPENDIX E: OPPORTUNITIES FOR I ALLOTMENTS	17
APPENDIX F: RANGE DEVELOPMENTS (See Draft Environmental Impact Statement)	
APPENDIX G: GRAZING SYSTEMS (See Draft Environmental Impact Statement)	
APPENDIX H: APPLICATION OF CRITERIA FOR ASSESSING WHETHER FEDERAL LANDS ARE UNSUITABLE FOR ALL OR CERTAIN STIPULATED METHODS OF COAL MINING Criteria	199
Rationale	∠∪∖

	APPENDIX I: MONITORING AND EVALUATION (See Draft Environmental Impact Statement)	
	APPENDIX J: SIGNIFICANT SOILS IN THE HEADWATERS RESOURCE AREA (See Draft Environmental Impact Statement)	
	APPENDIX K: SUMMARY OF WILDERNESS STATUS THROUGHOUT MONTANA (See Draft Environmental Impact Statement)	
	APPENDIX L: DETAILED DISCUSSION OF AREAS BEING STUDIED FOR WILDERNESS (See Draft Environmental Impact Statement)	
	APPENDIX M: METHODOLOGY USED IN THE RANGE ANALYSIS	.209 .210
	APPENDIX N: SHORT-TERM CHANGES IN STOCKING RATES FOR I ALLOTMENTS (See Draft Environmental Impact Statement)	
	APPENDIX O: OIL AND GAS IMPACTS MODEL (See Draft Environmental Impact Statement)	
	APPENDIX P: RANCH BUDGETS AND METHODOLOGY FOR ASSESSING RANCH-RELATED IMPACTS (See Draft Environmental Impact Statement)	
	APPENDIX Q: IMPACTS OF COAL DEVELOPMENT IN CASCADE COUNTY (See Draft Environmental Impact Statement)	
	APPENDIX R: WILDERNESS STUDY POLICY AND PLANNING CRITERIA (See Draft Environmental Impact Statement)	
	APPENDIX S: ECOSYSTEM REPRESENTATION (See Draft Environmental Impact Statement)	
	APPENDIX T: CRITERIA FOR DETERMINING SALE METHOD	. 227
	APPENDIX U: ERRATA	
	APPENDIX V: COMMENT LETTERS	.233
3	CSee Draft Environmental Impact Statement)	
15	REFERENCES (See Draft Environmental Impact Statement)	
	NDEX	265
	I =	

# LIST OF FIGURES, MAPS, AND TABLES

### Figures

INTRO	DDUCTION	
I-1	Steps in the Resource Management Planning Process	. 4
CHAP	TER 4	
4-1 4-2	Alternative A: Long-term Changes in Vegetative Condition	62 66
	Maps	
INTRO	DDUCTION	
	Location Map	. 2
CHAP	TER 2	
	Blind Horse Creek Alternatives	27
	Chute Mountain Alternatives  Deep Creek/Battle Creek Alternatives	29
	Black Sage Alternatives	30
	Yellowstone River Island Alternatives	
	Scratchgravel Hills Proposed Mineral Withdrawal	35

#### **Map Packet**

Management Units

### Tables

CHAP	IER 2	
2-1 2-3 2-4 2-5 2-7 2-9 2-11 2-13 2-14 2-15 2-16	Unleased Tracts to Remain Unleased Seasonal Wildlife Restrictions Summary of Oil and Gas Leasing and Development Guidelines Summary of Grazing Allotment and Riparian Habitat Guidelines Summary of Estimated Range Improvements Summary of Wilderness Study Recommendations Summary of Forest Management Guidelines Summary of Land Ownership Adjustment Guidelines Summary of Mineral Exploration and Development Guidelines Summary of Motorcycle Use Guidelines Summary of Motorized Vehicle Access Guidelines Summary of Utility and Transportation Corridor Guidelines Summary of Coal Leasing Guidelines Summary of Special Designations Comparison of Alternatives: Summary of Allocations/Outputs by Issue Comparison of Alternatives: Summary of Environmental Consequences	26
CHAP	PTER 4	
4-1 4-2 4-3 4-4 4-5 4-6 4-7 4-8	Impacts From Disposal Impacts from Acquisition Changes in Grazing Preference: Alternative A Long-term Wildlife Habitat Changes Resulting From Grazing Allotment and Riparian Habitat Management: Alternative A Changes in Income From Reductions in Stocking Rates: Alternative A Changes in Income From Increases in Stocking Rates: Alternative A Impacts on Permittees: Alternative A Social and Economic Effects of Land Ownership Adjustments	57 61 64 73 73
CHAP	PTER 6	
6-1 6-2	Headwaters RMP/EIS Team	83 85
CHAP	PTER 7	
7-1 7-2	Number of Contributors by Issue or Resource	88 89
7-3	Comments and Responses	91